

Environmental Profile

This LCA is calculated according to: ISO 14044, ISO 14040 and EN 15804

Ecochain v3.5.71



Product: 3032099 - OsmaD Bottle Gully-110 B/B 87.5° BN 110
Unit: 1 piece
Manufacturer: Wavin - UK - Chippenham - Verified

Wavin OsmaDrain - the definitive & comprehensive PVC-U gravity drainage system for residential, commercial & industrial projects. The source for all types of gravity drainage, sewer installation & pressure pipe systems in any private or public development. One of the UK's most trusted & leading names in plastic drainage systems.

LCA standard: EN15804+A2 (2019)
Standard database: Worldwide - Ecoinvent v 3.6 Cut-Off
Externally verified: Yes
Issue date: 09-02-2023
End of validity: 09-02-2028
Verifier: Martijn van Hövell - SGS Search



This LCA was evaluated according to EN15804+A2. It was concluded that the LCA complies with this standard.

The LCA background information and project dossier have been registered in the online Ecochain application in the account Wavin - UK - Chippenham - Verified (2020). (☑ = module declared, MND = module not declared).

A1	A2	A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
☑	☑	☑	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	☑	☑	☑	☑
Product stage					Use stage							End-of-Life stage				
A1 Raw material supply A2 Transport A3 Manufacturing					B1 Use B2 Maintenance B3 Repair B4 Replacement B5 Refurbishment B6 Operational energy use B7 Operational water use							C1 De-construction demolition C2 Transport C3 Waste processing C4 Disposal				
Construction process stage												Benefits and loads beyond the system boundaries				
A4 Transport gate to site A5 Assembly / Construction installation process												D Reuse- Recovery- Recycling- potential				

Environmental impacts and parameters

GWP-total = EF EN15804+A2 Climate Change [kg CO2 eq]; **GWP-f** = EF Climate change - Fossil [kg CO2 eq]; **GWP-b** = EF EN15804+A2 Climate Change - Biogenic [kg CO2 eq]; **GWP-luluc** = EF EN15804+A2 Climate Change - Land use and LU change [kg CO2 eq]; **ODP** = EF Ozone depletion [kg CFC11 eq]; **AP** = EF Acidification [mol H+ eq]; **EP-fw** = EF Eutrophication, freshwater [kg P eq]; **EP-m** = EF Eutrophication, marine [kg N eq]; **EP-T** = EF Eutrophication, terrestrial [mol N eq]; **POCP** = EF Photochemical ozone formation [kg NMVOC eq]; **ADP-mm** = EF Resource use, minerals and metals [kg Sb eq]; **ADP-f** = EF Resource use, fossils [MJ]; **WDP** = EF Water use [m3 depriv.]; **PM** = EF Particulate matter [disease inc.]; **IR** = EF Ionising radiation [kBq U-235 eq]; **ETP-fw** = EF Ecotoxicity, freshwater [CTUe]; **HTP-c** = EF Human toxicity, cancer [CTUh]; **HTP-nc** = EF Human toxicity, non-cancer [CTUh]; **SQP** = EF Land use [Pt]; **PERE** = Use of renewable primary energy excluding renewable primary energy resources used as raw materials [MJ]; **PERM** = Use of renewable primary energy resources used as raw materials [MJ]; **PERT** = Total use of renewable primary energy resources [MJ]; **PENRE** = Use of non-renewable primary energy excluding non-renewable primary energy resources used as raw materials [MJ]; **PENRM** = Use of non-renewable primary energy resources used as raw materials [MJ]; **PENRT** = Total use of non-renewable primary energy resources [MJ]; **PET** = Total energy [MJ]; **SM** = Use of secondary material [kg]; **RSF** = Use of renewable secondary fuels [MJ]; **NRSF** = Use of non-renewable secondary fuels [MJ]; **FW** = Use of net fresh water [m3]; **HWD** = Hazardous waste disposed [kg]; **NHWD** = Non-hazardous waste disposed [kg]; **RWD** = Radioactive waste disposed [kg]; **CRU** = Components for re-use [kg]; **MFR** = Materials for recycling [kg]; **MER** = Materials for energy recovery [kg]; **EE** = Exported energy [MJ]; **EET** = Exported energy thermic [MJ]; **EEE** = Exported energy electric [MJ]

Statement of Confidentiality

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Results

Environmental impact	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
GWP-total	kg CO2 eq	4.95E+0	1.96E-1	5.05E-1	5.65E+0	6.39E-2	1.78E+0	2.10E-2	-2.70E+0	4.81E+0
GWP-f	kg CO2 eq	4.92E+0	1.96E-1	4.92E-1	5.61E+0	6.39E-2	1.78E+0	2.10E-2	-2.68E+0	4.79E+0
GWP-b	kg CO2 eq	3.17E-2	-2.80E-5	1.24E-2	4.41E-2	3.88E-5	-1.82E-3	2.54E-5	-1.80E-2	2.43E-2
GWP-luluc	kg CO2 eq	3.90E-3	1.24E-4	4.19E-4	4.44E-3	2.26E-5	7.44E-4	5.31E-7	-1.64E-3	3.57E-3
ODP	kg CFC11 eq	2.44E-6	4.04E-8	4.40E-8	2.53E-6	1.47E-8	1.98E-7	7.54E-10	-1.25E-6	1.49E-6
AP	mol H+ eq	2.26E-2	5.46E-3	2.66E-3	3.07E-2	3.64E-4	3.45E-3	1.83E-5	-9.98E-3	2.46E-2
EP-fw	kg P eq	2.10E-4	9.47E-7	6.84E-6	2.18E-4	5.26E-7	2.47E-5	2.40E-8	-9.34E-5	1.50E-4
EP-m	kg N eq	3.79E-3	1.36E-3	5.23E-4	5.68E-3	1.30E-4	8.42E-4	1.19E-5	-1.73E-3	4.94E-3
EP-T	mol N eq	4.15E-2	1.52E-2	5.70E-3	6.23E-2	1.43E-3	9.28E-3	7.31E-5	-1.84E-2	5.47E-2
POCP	kg NMVOC eq	1.45E-2	3.95E-3	2.50E-3	2.10E-2	4.10E-4	2.79E-3	2.53E-5	-6.54E-3	1.77E-2
ADP-mm	kg Sb eq	2.47E-3	2.10E-6	1.21E-5	2.48E-3	1.65E-6	1.36E-5	1.84E-8	-5.22E-5	2.44E-3
ADP-f	MJ	1.29E+2	2.60E+0	5.44E+0	1.37E+2	9.81E-1	9.53E+0	5.50E-2	-6.71E+1	8.06E+1
WDP	m3 depriv.	7.45E+0	4.64E-3	1.65E-1	7.62E+0	3.01E-3	3.69E-1	3.60E-4	-3.68E+0	4.32E+0
PM	disease inc.	1.58E-7	8.09E-9	1.82E-8	1.84E-7	5.77E-9	4.34E-8	3.79E-10	-6.45E-8	1.69E-7
IR	kBq U-235 eq	2.65E-1	1.12E-2	1.34E-2	2.89E-1	4.29E-3	3.32E-2	2.53E-4	-1.18E-1	2.09E-1
ETP-fw	CTUe	9.93E+1	1.76E+0	1.42E+1	1.15E+2	7.96E-1	7.02E+1	7.77E-1	-3.51E+1	1.52E+2
HTP-c	CTUh	3.49E-9	1.07E-10	5.59E-10	4.16E-9	2.83E-11	1.07E-9	1.51E-12	-1.34E-9	3.92E-9
HTP-nc	CTUh	1.11E-7	1.58E-9	3.03E-8	1.43E-7	9.49E-10	2.51E-8	1.51E-10	-4.62E-8	1.23E-7
SQP	Pt	1.61E+1	7.33E-1	1.86E+0	1.87E+1	8.39E-1	5.97E+0	1.41E-1	-6.52E+0	1.91E+1
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	5.89E+0	2.15E-2	2.97E+1	3.56E+1	1.41E-2	6.80E-1	2.05E-3	-2.67E+0	3.36E+1
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	5.89E+0	2.15E-2	2.97E+1	3.56E+1	1.41E-2	6.80E-1	2.05E-3	-2.67E+0	3.36E+1
PENRE	MJ	1.38E+2	2.76E+0	5.77E+0	1.47E+2	1.04E+0	1.01E+1	5.84E-2	-7.23E+1	8.59E+1
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	1.38E+2	2.76E+0	5.77E+0	1.47E+2	1.04E+0	1.01E+1	5.84E-2	-7.23E+1	8.59E+1
PET	MJ	1.44E+2	2.78E+0	3.55E+1	1.83E+2	1.06E+0	1.08E+1	6.05E-2	-7.49E+1	1.20E+2
SM	kg	0	0	0	0	0	0	0	0	0
RSF	MJ	0	0	0	0	0	0	0	0	0
NRSF	MJ	0	0	0	0	0	0	0	0	0
FW	m3	8.55E-2	1.68E-4	4.80E-3	9.05E-2	1.11E-4	1.01E-2	6.74E-5	-3.90E-2	6.18E-2

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	3.82E-4	3.24E-6	4.89E-5	4.34E-4	2.51E-6	1.54E-5	6.70E-8	-5.11E-5	4.01E-4
NHWD	kg	4.58E-1	3.76E-2	1.00E-2	5.05E-1	6.08E-2	3.53E-1	2.43E-1	-1.95E-1	9.68E-1
RWD	kg	2.40E-4	1.80E-5	1.29E-5	2.71E-4	6.67E-6	3.57E-5	3.58E-7	-1.04E-4	2.09E-4
CRU	kg	0	0	0	0	0	0	0	0	0
MFR	kg	0	0	0	0	0	0	0	0	0
MER	kg	0	0	0	0	0	0	0	0	0
EE	MJ	0	0	0	0	0	0	0	0	0
EET	MJ	0	0	0	0	0	0	0	0	0
EEE	MJ	0	0	0	0	0	0	0	0	0



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